

The University of South Dakota  
Major Credit Hour count: 66  
Major: Physics, B.S.

[2020-2021 Academic Catalog]

<u>Year / Semester</u>	SGR/Major Requirement	<u>Cr Hrs</u>	<u>Year / Semester</u>	SGR/Major Requirement	<u>Cr Hrs</u>
<b><u>First Year - 1st Semester</u></b>			<b><u>First Year - 2nd Semester</u></b>		
ENGL 101 Composition I	SGR 1	3	ENGL 210 Introduction to Literature	BS	3
PHYS 211/211L University Physics & Lab	SGR 6+M	5	PHYS 213/213L Univ. Physics II & Lab	SGR 6+M	5
MATH 123 Calculus*	SGR 5+BS+M	5	MATH 125 Calculus II	Major	5
SPCM 101 Fundamentals of Speech	SGR 2	3	Social Science	SGR 3	3
<b>Semester Credit Hours:</b>		<b>16</b>	<b>Semester Credit Hours:</b>		<b>16</b>
<b><u>Second Year - 1st Semester</u></b>			<b><u>Second Year - 2nd Semester</u></b>		
PHYS 431 Intro to Modern Physics	Major	3	PHYS 332 Experimental Modern Phys	Major	2
MATH 225 Calculus III	Major	4	MATH 321 Differential Equations	Major	3
Fine Arts	SGR 4	3	CSC 155&Lab Computer Science I	Major	4
Advanced Composition	SGR 1	3	Social Science	SGR 3	3
Humanities	SGR 4	3	Elective		3
<b>Semester Credit Hours:</b>		<b>16</b>	<b>Semester Credit Hours:</b>		<b>15</b>
<b><u>Third Year - 1st Semester</u></b>			<b><u>Third Year - 2nd Semester</u></b>		
PHYS 451 Classical Mechanics	Major	4	PHYS 421 Electromagnetism	Major	4
CHEM 112/112L General Chemistry & Lab	BS+Major	4	CHEM 114/114L Gen. Chem. II & Lab	BS+Major	4
Additional Social Science/Humanities	BS	3	PHYS Elective, Upper-Division	Major	3
Electives		3	Additional Social Science/Humanities	BS	3
<b>Semester Credit Hours:</b>		<b>14</b>	PHYS 498 Undergraduate Research	Major	1
<b><u>Fourth Year - 1st Semester</u></b>			<b>Semester Credit Hours:</b>		<b>15</b>
PHYS 441 Thermodynamics	Major	2	<b><u>Fourth Year - 2nd Semester</u></b>		
PHYS Elective, Upper-Division	Major	3	PHYS 471 Quantum Mechanics	Major	4
Electives		10	Elective		8
<b>Semester Credit Hours:</b>		<b>15</b>	MATH elective above 103	Major	1
			<b>Semester Credit Hours:</b>		<b>13</b>
			<b>Total Major Requirements</b>		<b>120</b>

**Notes:** \*Students who have not taken a calculus class prior to enrollment in college may wish to delay University Physics until the sophomore year. Students pursuing this option should enroll in Chemistry during the first year, and move PHYS 431 & 332 to the junior year. Most students choose a Math minor because the Physics major already requires 17 credits of Math.